Code:- 014-21-000001

roads and drains in Magnam School Surrounding and Other area in Bagalagunte Ward no.14

Est .Cost Rs 90.00 Lakhs

Description of Work	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
Removing and refixing stone slabs of drains and pointing in CM (1:3)(Pg no 27/5.33) PWD SR 2018-19								
For RCC drain								
23rd Cross								
24th Cross Road		2	140.00	0.90		252.00		
		1	38.00	0.90		34.20		
50% of Missing Slab					(+)	286.20		
					(-)	143.10		
	Sqm					143.10	111.30	15927.03
Basic Rate	105.00							
Area Weightage @ 6%	6.30							
	111.30							
KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 **(Page No-140 Item no - 18.47 of KPWD SR 2018-19)**								
For CC Road								
22nd Cross Road		1	150.00	5.25	0.20	157.50		
22nd 1st Cross Road		1	49.00	3.90	0.20	38.22		
22nd 2nd Cross Road		1	52.00	4.85	0.20	50.44		
22nd 3rd Cross Road		1	93.00	4.85	0.20	90.21		
3rd Cross, 1st Road		1	43.00	4.10	0.20	35.26		
3rd Cross, 2nd Road		1	45.00	5.10	0.20	45.90		
23rd Cross Road		1	67.00	5.55	0.20	74.37		
24th Cross Road		1	37.00	4.45	0.20	32.93		
For RCC drain								
Dismantling Flagging Course								
23rd Cross		2	140.00	0.15	0.20	8.40		
24th Cross Road		1	38.00	0.15	0.20	1.14		
	Cum					534.37	952.94	509222.55
Basic Rate	899.00							
Area Weightage 6%	53.94							
Grand Total	**952.94**							
3 KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **(Page No. 146/ Item No.19.55/ PWD SR 2018-19)**								
For Asphalt Road								
23rd Cross		2	140.00	0.60		168.00		
	Sqm					168.00	95.40	16027.20
Basic Rate	90.00							
Area Weightage 6%	5.40							
Grand Total	**95.40**							
4 KSRRB 300-3. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil invoiving , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. **(Page No. 143/ Item No. 19.1/ PWD SR 2018-19)**								
For CC Road								
22nd Cross Road		1	150.00	5.25	0.30	236.25		
22nd 1st Cross Road		1	49.00	3.90	0.30	57.33		
22nd 2nd Cross Road		1	52.00	4.85	0.30	75.66		
22nd 3rd Cross Road		1	93.00	4.85	0.30	135.32		
3rd Cross, 1st Road		1	43.00	4.10	0.30	52.89		
3rd Cross, 2nd Road		1	45.00	5.10	0.30	68.85		
23rd Cross Road		1	67.00	5.55	0.30	111.56		
24th Cross Road		1	37.00	4.45	0.30	49.40		

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	r RCC drain								
	23rd Cross		2	140.00	1.10	1.00	308.00		
	24th Cross Road		1	38.00	1.10	1.00	41.80		
	For Asphalt Road								
	23rd Cross		2	140.00	0.60	0.25	42.00		
		Cum					**1179.05**	**137.80**	**162472.40**
	Basic Rate	130.00							
	Area Weightage 6%	7.80							
	Grand Total	**137.80**							
5	KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 **(Page No-147 Item no - 19.64 of KPWD SR 2018-19)**								
	For CC Road								
	22nd Cross Road		1	150.00	5.25		787.50		
	22nd 1st Cross Road		1	49.00	3.90		191.10		
	22nd 2nd Cross Road		1	52.00	4.85		252.20		
	22nd 3rd Cross Road		1	93.00	4.85		451.05		
	3rd Cross, 1st Road		1	43.00	4.10		176.30		
	3rd Cross, 2nd Road		1	45.00	5.10		229.50		
	23rd Cross Road		1	67.00	5.55		371.85		
	24th Cross Road		1	37.00	4.45		164.65		
	For Asphalt Road								
	23rd Cross Road		2	140.00	0.60		168.00		
		Sqm					**2792.15**	**6.36**	**17758.07**
	Basic Rate	6.00							
	Area Weightage 6%	0.36							
	Grand Total	**6.36**							
6	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap I basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve thedesired density complete as per specifications. MORTH Specification No. 406 **(Page No-155 Item no - 20.18 of KPWD SR 2018-19).**								
	For CC Road								
	22nd Cross Road		1	150.00	5.25	0.10	78.75		
	22nd 1st Cross Road		1	49.00	3.90	0.10	19.11		
	22nd 2nd Cross Road		1	52.00	4.85	0.10	25.22		
	22nd 3rd Cross Road		1	93.00	4.85	0.10	45.11		
	3rd Cross, 1st Road		1	43.00	4.10	0.10	17.63		
	3rd Cross, 2nd Road		1	45.00	5.10	0.10	22.95		
	23rd Cross Road		1	67.00	5.55	0.10	37.19		
	24th Cross Road		1	37.00	4.45	0.10	16.47		
	For Asphalt Road								
	23rd Cross Road		2	140.00	0.60	0.20	33.60		
		Cum					**296.02**	**2001.28**	**592408.90**
	Basic Rate	1888.00							
	Area Weightage 6%	113.28							
	Grand Total	**2001.28**							
7	KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. **(P.No-222,I No-27.18 pwd 2018-19)**								
	For CC Road		1	150.00	5.25	0.15	118.13		
	22nd Cross Road		1	49.00	3.90	0.15	28.67		
	22nd 1st Cross Road		1	52.00	4.85	0.15	37.83		
	22nd 2nd Cross Road		1	93.00	4.85	0.15	67.66		
	22nd 3rd Cross Road		1	43.00	4.10	0.15	26.45		
	3rd Cross, 1st Road		1	45.00	5.10	0.15	34.43		
	3rd Cross, 2nd Road		1	67.00	5.55	0.15	55.78		
	23rd Cross Road		1	37.00	4.45	0.15	24.70		
	24th Cross Road								

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	For RCC drain								
	23rd Cross		2	140.00	1.10	0.15	46.20		
	24th Cross Road		1	38.00	1.10	0.15	6.27		
		Cum					446.09	5509.33	2457669.31
	Basic Rate	5115.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1079.39	Note:- (220*490.63/100)=1079.39						
	Add Cement cost as per Issue rate	1161.86	Note:- (220*264.06/50)=1161.86						
	Sub Total	**5197.48**							
	Area Weightage 6%	311.85							
	Grand Total	**5509.33**							
8	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm **(I No-37.59.2,P No-271 PWD 2018-19)**								
	For RCC drain								
	Bed Concrete								
	23rd Cross		2	140.00	0.90	0.15	37.80		
	24th Cross Road		1	38.00	0.90	0.15	5.13		
	Side Walls								
	23rd Cross		4	140.00	0.15	0.60	50.40		
	24th Cross Road		2	38.00	0.15	0.60	6.84		
		Cum					**100.17**	**7189.42**	**720164.02**
	Basic Rate =	6670.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123 =	-1471.89	Note:- (300*490.63/100)=1471.89						
	Add Cement cost as per Issue rate =	1584.36	Note:- (300*264.06/50)=1584.36						
	Sub Total =	**6782.47**							
	Area Weightage 6% =	406.95							
	Grand Total =	**7189.42**							
9	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3 **(I No-29.29.2,P No-239 PWD SR 2018-19)**								
	Considering steel For Drain @65kg/Cum		1	100.17	65.00		6511.05		
		Tonne					**6.51**	**73992.24**	**481767.17**
	Basic Rate =	**69804.00**							
	Area Weightage 6% =	4188.24							
	Grand Total =	**73992.24**							
10	Providing and fixing Precast RCC cover slabs of 100 mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift charges,curing and concrtee finished surface on both sides etc,and complete as per the directions of Enginner in charges.(Data Rate)								
	For RCC drain		50% of Missing Slab Qty No.01				143.10		
		Sqm					**143.10**	**1615.00**	**231106.50**
	Data Rate =	**1615.00**							

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11	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) **(Page No. 175.tem No.22.6.1,PW,P & IWTD SR 2018-19)**									
	For CC Road								
	22nd Cross Road		1	150.00	5.25	0.15	118.13		
	22nd 1st Cross Road		1	49.00	3.90	0.15	28.67		
	22nd 2nd Cross Road		1	52.00	4.85	0.15	37.83		
	22nd 3rd Cross Road		1	93.00	4.85	0.15	67.66		
	3rd Cross, 1st Road		1	43.00	4.10	0.15	26.45		
	3rd Cross, 2nd Road		1	45.00	5.10	0.15	34.43		
	23rd Cross Road		1	67.00	5.55	0.15	55.78		
	24th Cross Road		1	37.00	4.45	0.15	24.70		
		Cum					**393.62**	**5354.02**	**2107463.46**
	Basic Rate	4916.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1766.27	Note:- (360*490.63/100)=1766.27						
	Add Cement cost as per Issue rate	1901.23	Note:- (360*264.06/50)=1901.23						
	Sub Total	**5050.96**							
	Area Weightage 6%	303.06							
	Grand Total	**5354.02**							
12	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg I sqm using mechanical means complete as per specifications.MORTH Specification No. 502 **(Page No-158 Item no - 21.6 of KPWD SR 2018-19)**								
	For Asphalt Road								
	23rd Cross Road		2	140.00	0.60		168.00		
		Sqm					**168.00**	**26.50**	**4452.00**
	Issue Rate	25.00							
	Area Weightage 6%	1.50							
	Grand Total	**26.50**							
13	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen **(Page No-160 Item no - 21.17.6 of KPWD SR 2018-19)**								
	For Asphalt Road								
	23rd Cross Road		2	140.00	0.60	0.05	8.40		
		Cum					**8.40**	**5727.18**	**48108.31**
	Issue Rate	5403.00							
	Area Weightage 6%	324.18							
	Grand Total	**5727.18**							
14	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 **(Page No-158 Item no - 21.2 of KPWD SR 2018-19).**								
	For Asphalt Road								
	23rd Cross Road		1	140.00	4.55		637.00		
		Sqm					**637.00**	**5.30**	**3376.10**
	Basic Rate	5.00							
	Area Weightage 6%	0.30							
	Grand Total	**5.30**							

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KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VGIO) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH **(Page No-158 Item no - 21.7 of KPWD SR 2018-19).**

For Asphalt Road								
23rd Cross Road		1	140.00	4.55		637.00		
	Sqm					**637.00**	**12.72**	**8102.64**
Issue Rate	12.00							
Area Weightage 6%	0.72							
Grand Total	**12.72**							

KSRRB M500-19. Providing and laying bituminous concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. Clause 507 of MORTH V Version as per IRC SP-53-2015,**do-Using 40-60 TPH Capacity HMP With Mechanical Paver Grading II (30-45mm) with 5.4% of Modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (Waste Plastic) (P.No.171 & I.No.21.78.12, PWD 18-19)**

For Asphalt Road								
23rd Cross Road		1	140.00	4.55	0.04	25.48		
	Cum					**25.48**	**6761.74**	**172289.14**
Issue Rate	6379.00							
Area Weightage 6%	382.74							
Grand Total	**6761.74**							

KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH -100/ Chapter 1 **(P.No.136 & I.No.17.1 PWD 18-19)**

Vide Item No.2,3 & 4						1724.34		
	Cum					**1724.34**	**57.00**	**98287.10**
Basic Rate	57.00							

KSRRB M100-4.1. Cost of Haulage Excluding Loading and Unloading MORTH -100/ Chapter 1 Case-I : Surface Road **(P.No.136 & I.No.17.4 PWD 18-19)**

						1724.34		
Vide Item No.16						**1724.34**	**25.60**	**44142.98**
	t.km							
Lead for earth 10 km=(10*1.28*2=25.60)	25.60							

Total Construtions cost	**7690744.88**
GST Charges 12%	**922889.39**
Tender Premium 5%	**384537.24**
Sub Total	**8998171.51**
Miscellaneous & Rounding Off	**1828.49**
Grand Total	**9000000.00**

Rupees Ninety Lakh(s) Only

Certificate:-

1) This work comes within BBMP limits.
2) Certified that Personaly Inspected the Work Spot
3) Certified that the estimate is prepared based on CSR of PWD Banglore Circle 2018-19
4) Estimate is prepared Making Use of essential item of work as per site Conditions in safest way of Execution in most economical way
5) This work is not included in any other program of work

Assistant Engineer

Assistant Executive Engineer
Dasarahalli Sub - Division

Executive Engineer
Dasarahalli Zone

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ADMINISTRATIVELY SANCTIONED FOR

(Rupees Ninty lakh

Under the Head of Account P-3485 Construction of Kannada kala Bhavan

Registered as no EE(D.D.)/AS 107/2021 Subject to conditions contained in Enclosed Memo No. EE/DD/AS/107/2020-21 Dt 29/07/20

EE/AE. (DASARAHALLI) BBMP

Technically Sanctioned For Rs: 90.00 Lakhs

Rs. In Words Ninty lakh Rupees only/-

Under P-3485 Construction of Kannada kala Bhavan

Job Code No. 014-21-000001

Registered as SE No. 69 / 20-21 subject to conditions contained in Enclosed Memo No. SE/D2/TS / 69 /2020-21 Dt. 11/08/20

AE / JE TA SE(D) 11/08

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